

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521220

Luminaire Tested: **SQ4-BB-100U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521220
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-100D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

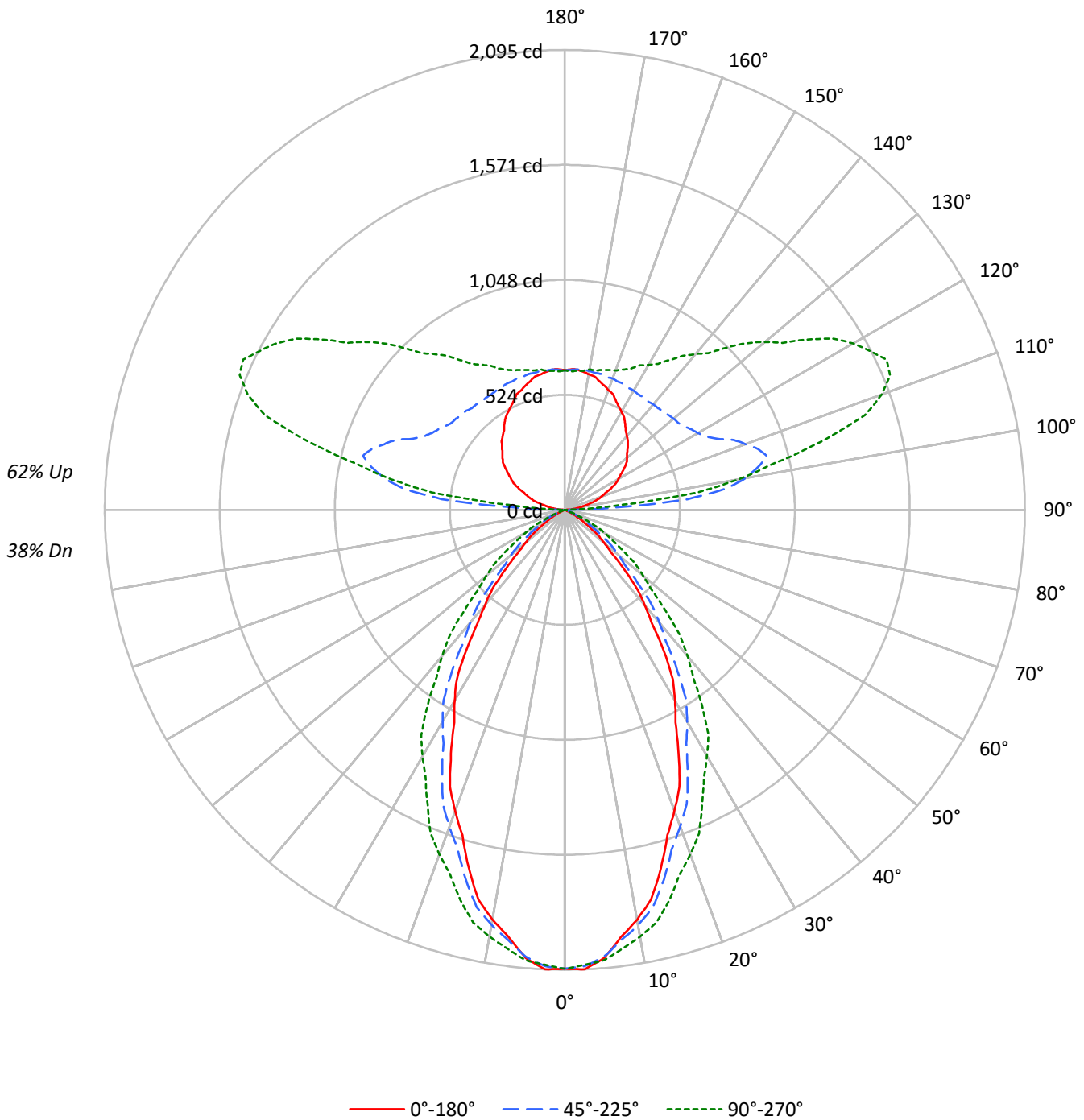
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6609.0 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	40	34
2	89	82	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	74	68	62	58	56	52	49	45	43	41	35	34	32	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
5	70	60	52	47	64	55	49	44	46	42	38	38	35	32	30	28	26	23
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19286	19286	19286
5°	18976	18929	19069
10°	17755	17992	18494
15°	16141	16653	17581
20°	14328	15073	16394
25°	12478	13466	15062
30°	10688	11863	13802
35°	8862	10069	12279
40°	6808	8051	10463
45°	4922	6096	8418
50°	3353	4543	6677
55°	2180	3286	5189
60°	1251	2314	3751
65°	332	1412	1899
70°	165	437	545
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.8	2.9
10°-20°	487.9	7.4
20°-30°	610.8	9.2
30°-40°	564.1	8.5
40°-50°	379.1	5.7
50°-60°	195.8	3.0
60°-70°	61.3	0.9
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	327.6	5.0
100°-110°	791.9	12.0
110°-120°	844.6	12.8
120°-130°	684.0	10.4
130°-140°	529.6	8.0
140°-150°	404.0	6.1
150°-160°	292.5	4.4
160°-170°	180.1	2.7
170°-180°	61.0	0.9
0°-30°	1289.4	19.5
0°-40°	1853.5	28.0
0°-60°	2428.4	36.7
0°-90°	2493.6	37.7
90°-120°	1964.1	29.7
90°-150°	3581.8	54.2
90°-180°	4115.0	62.3
0°-180°	6609.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2090	2090	2090	2090	2090	
5°	2049	2028	2044	2051	2059	190
15°	1690	1684	1744	1802	1841	471
25°	1226	1236	1323	1413	1480	562
35°	787	807	894	999	1090	487
45°	377	400	467	558	645	296
55°	136	158	204	262	323	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	32	164	561	365	256	36
105°	126	219	952	1231	1216	134
115°	232	296	765	1450	1617	229
125°	330	380	664	1153	1354	294
135°	405	453	637	909	1046	313
145°	479	515	625	773	833	300
155°	549	573	633	684	709	254
165°	607	616	641	650	660	171
175°	642	640	642	637	635	61
180°	635	635	635	635	635	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2090.4	2090.4	2090.4	2090.4	2090.4
2.5°	2095.2	2075.5	2080.7	2080.6	2075.0
5°	2048.9	2028.2	2043.9	2051.1	2059.0
7.5°	1962.4	1946.1	1976.3	1998.9	2015.3
10°	1895.2	1881.4	1920.5	1951.3	1974.1
12.5°	1817.5	1806.9	1854.1	1896.5	1925.5
15°	1689.9	1684.0	1743.5	1802.0	1840.6
17.5°	1553.2	1553.0	1620.9	1693.6	1740.1
20°	1459.3	1462.3	1535.2	1615.3	1669.7
22.5°	1365.5	1372.4	1450.2	1533.8	1596.1
25°	1225.7	1235.6	1322.8	1413.3	1479.6
27.5°	1091.4	1105.8	1197.6	1291.7	1372.4
30°	1003.2	1020.0	1113.5	1212.4	1295.5
32.5°	916.7	936.6	1027.7	1132.4	1217.0
35°	786.8	806.6	894.0	999.2	1090.2
37.5°	652.7	672.1	757.5	861.0	959.3
40°	565.3	587.1	668.5	768.8	868.7
42.5°	486.0	507.8	584.3	683.0	777.3
45°	377.2	400.0	467.2	558.2	645.2
47.5°	287.0	311.7	370.7	453.1	532.4
50°	233.6	258.3	316.5	389.1	465.2
52.5°	190.7	214.7	267.2	335.5	405.3
55°	135.5	158.3	204.3	262.3	322.6
57.5°	93.6	113.2	154.5	202.9	250.2
60°	67.8	86.5	125.4	164.7	203.3
62.5°	45.1	62.3	100.3	130.4	156.3
65°	15.2	29.0	64.7	78.1	87.0
67.5°	7.7	9.3	34.0	35.9	38.8
70°	6.1	6.1	16.2	17.3	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	88.7	208.9	101.6	68.9
95°	32.3	163.9	561.4	365.0	255.8
97.5°	57.3	181.6	739.3	712.3	611.4
100°	76.7	192.6	837.3	883.9	801.0
102.5°	95.0	202.4	902.0	1026.8	977.6
105°	126.5	218.7	951.8	1231.4	1215.6
107.5°	157.5	237.8	922.4	1395.5	1432.6
110°	179.0	254.1	875.0	1466.2	1536.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	200.6	270.3	833.0	1483.5	1602.8
115°	231.5	296.0	764.6	1449.6	1616.8
117.5°	262.2	323.1	724.5	1371.6	1567.5
120°	282.7	339.3	698.7	1310.5	1515.8
122.5°	304.2	356.6	682.5	1247.9	1450.1
125°	329.8	379.8	663.7	1152.9	1354.3
127.5°	355.1	402.2	650.5	1072.4	1249.3
130°	370.2	416.3	646.2	1016.3	1190.0
132.5°	384.2	432.4	639.7	975.8	1123.3
135°	405.2	452.6	636.8	909.1	1046.0
137.5°	425.1	472.8	627.3	863.9	967.1
140°	440.2	483.6	627.3	831.4	926.2
142.5°	455.3	498.7	621.9	803.1	883.1
145°	479.2	514.8	624.6	772.7	833.3
147.5°	501.6	536.1	623.0	737.8	787.8
150°	515.6	545.9	627.3	722.5	761.9
152.5°	530.7	559.9	626.2	706.2	741.5
155°	549.2	572.9	632.7	684.4	709.4
157.5°	571.6	591.9	631.4	676.1	690.9
160°	580.2	597.3	636.8	665.3	675.8
162.5°	594.2	609.2	634.6	661.9	668.3
165°	607.1	616.3	640.8	650.4	659.6
167.5°	623.0	629.1	639.2	649.7	649.9
170°	627.3	631.3	643.5	642.3	648.9
172.5°	634.9	637.8	640.3	643.1	639.2
175°	642.1	639.5	642.1	636.7	635.4
177.5°	640.8	640.8	638.6	636.4	631.1
180°	635.4	635.4	635.4	635.4	635.4

(END OF REPORT)